

## PATENT COOPERATION TREATY

From the  
INTERNATIONAL SEARCHING AUTHORITY

To:

HAW, Yong Noke

8th Fl. Songchon Bldg., 642-15, Yeoksam-dong, kangnam-ku  
Seoul 135-080 Republic of Korea

**PCT**

WRITTEN OPINION OF THE  
INTERNATIONAL SEARCHING AUTHORITY

(PCT Rule 43bis.1)

Date of mailing  
(day/month/year) **14 DECEMBER 2005 (14.12.2005)**

Applicant's or agent's file reference  
**05FLWW101**

**FOR FURTHER ACTION**

See paragraph 2 below

International application No.

**PCT/KR2005/002990**

International filing date (day/month/year)

**09 SEPTEMBER 2005 (09.09.2005)**

Priority date(day/month/year)

**09 SEPTEMBER 2004 (09.09.2004)**

International Patent Classification (IPC) or both national classification and IPC

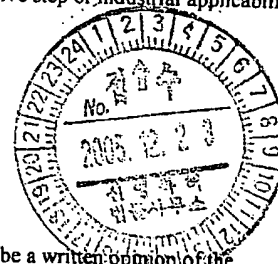
**IPC7 A47L 15/46**

Applicant

**LG ELECTRONICS, INC. et al**

1. This opinion contains indications relating to the following items:

- ☒ Box No. I Basis of the opinion
- ☐ Box No. II Priority
- ☐ Box No. III Non-establishment of opinion with regard to novelty, inventive step and industrial applicability
- ☐ Box No. IV Lack of unity of invention
- ☒ Box No. V Reasoned statement under Rule 43bis.1(a)(i) with regard to novelty, inventive step or industrial applicability; citations and explanations supporting such statement
- ☐ Box No. VI Certain documents cited
- ☐ Box No. VII Certain defects in the international application
- ☐ Box No. VIII Certain observations on the international application



2. **FURTHER ACTION**

If a demand for international preliminary examination is made, this opinion will be considered to be a written opinion of the International Preliminary Examining Authority ("IPEA") except that this does not apply where the applicant chooses an Authority other than this one to be the IPEA and the chosen IPEA has notified the International Bureau under Rule 66.1bis(b) that written opinions of this International Searching Authority will not be so considered.

If this opinion is, as provided above, considered to be a written opinion of the IPEA, the applicant is invited to submit to the IPEA a written reply together, where appropriate, with amendments, before the expiration of 3 months from the date of mailing of Form PCT/ISA/220 or before the expiration of 22 months from the priority date, whichever expires later. For further options, see Form PCT/ISA/220.

3. For further details, see notes to Form PCT/ISA/220.

Name and mailing address of the ISA/KR



Korean Intellectual Property Office  
920 Dunsan-dong, Seo-gu, Daejeon  
302-701, Republic of Korea

Facsimile No. 82-42-472-7140

Date of completion of this opinion

**13 DECEMBER 2005 (13.12.2005)**

Authorized officer

**KIM, Sang Wook**

Telephone No. 82-42-481-5476



**WRITTEN OPINION OF THE  
INTERNATIONAL SEARCHING AUTHORITY**

International application No.

PCT/KR2005/002990

**Box No. I Basis of this opinion**

1. With regard to the language, this opinion has been established on the basis of the international application in the language in which it was filed, unless otherwise indicated under this item.  
☐ This opinion has been established on the basis of a translation from the original language into the following language \_\_\_\_\_, which is the language of a translation furnished for the purposes of international search (under Rules 12.3 and 23.1(b)).
2. With regard to any **nucleotide and/or amino acid sequence** disclosed in the international application and necessary to the claimed invention, this opinion has been established on the basis of:
  - a. type of material  
☐ a sequence listing  
☐ table(s) related to the sequence listing
  - b. format of material  
☐ on paper  
☐ in electronic form
  - c. time of filing/furnishing  
☐ contained in the international application as filed.  
☐ filed together with the international application in electronic form.  
☐ furnished subsequently to this Authority for the purposes of search.
3. ☐ In addition, in the case that more than one version or copy of a sequence listing and/or table relating thereto has been filed or furnished, the required statements that the information in the subsequent or additional copies is identical to that in the application as filed or does not go beyond the application as filed, as appropriate, were furnished.
4. Additional comments:

**WRITTEN OPINION OF THE  
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**Box No. V Reasoned statement under Rule 43bis.1(a)(i) with regard to novelty, inventive step or industrial applicability; citations and explanations supporting such statement**

**1. Statement**

Novelty (N)	Claims	1-18	YES
	Claims		NO
Inventive step (IS)	Claims		YES
	Claims	1-18	NO
Industrial applicability (IA)	Claims	1-18	YES
	Claims		NO

**2. Citations and explanations :**

Reference is made to the following documents:

D1: KR 10-2004-0045729 A

D2: KR 10-1999-0004058 A

The present invention relates to a controlling method of a dishwasher, which includes the steps of selecting a wash cycle and inputting command settings by a user, starting operation of the dishwasher according to the selected cycle and driving a wash pump and a discharge member, and controlling the dishwasher during the cycle to end the wash cycle with an upper arm operating.

D1 discloses a method for controlling a dishwasher comprising the steps of: driving a washing motor after supplying water for a first setting time if a user inputs a start signal (S10-S13); detecting the electric characteristic of the washing motor (S14); and stopping the supply of water and performing a washing process if the electric characteristic of the washing motor continues for a second setting time (S16-S18).

D2 discloses a washing method of a dishwasher comprising: a water supplying step for supplying water to dishes; a water supply completion determining step for determining whether or not the level of water supplied during said water supplying step reaches the target water level; a water jetting step for jetting cleaning water to dishes through a lower jetting nozzle by driving a pump when the water level reaches the target level during said water supply completion determining step. Said washing method is characterized in that the water supplied during the first step is jetted from the upper part of dishes toward the lower part thereof, and after a predetermined time, the water is jetted from the lower part of dishes toward the upper part thereof.

(Continued on Supplemental Sheet.)

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International application No.

PCT/KR2005/002990

**Supplemental Box**

In case the space in any of the preceding boxes is not sufficient.

Continuation of:

Box V.

**Novelty**

Neither D1 nor D2 discloses a controlling method of a dishwasher which includes control of the dishwasher during the cycle to end the wash cycle with an upper arm operating, as set forth in the present application. Therefore, the subject matter of claims 1-18 is considered to be novel under PCT Article 33(2).

**Inventive Step**

The dishwasher of claims 1-4 and the controlling method of the dishwasher of claims 5-18, which includes the steps of selecting a wash cycle and inputting command settings by a user, starting operation of the dishwasher according to the selected cycle and driving a wash pump and a discharge member, and controlling the dishwasher during the cycle to end the wash cycle with an upper arm operating, could have been arrived at by a combination of D2 and D1 which discloses a method for controlling a dishwasher including a controlling member, a water level detecting member, a key input member, a heater driving member, and a pump driving member. Accordingly, the subject matter of claims 1-18 does not involve an inventive step under PCT Article 33(3).

**Industrial Applicability**

Claims 1-18 are considered to be industrially applicable under PCT Article 33(4).